



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,119	12/15/2003	Lennart J. Brandel	7343-2	3619
7590	05/21/2007		EXAMINER	
JOHNS MANVILLE Legal Department 10100 West Ute Avenue Littleton, CO 80127			PIZIALI, ANDREW T	
			ART UNIT	PAPER NUMBER
			1771	
			MAIL DATE	DELIVERY MODE
			05/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/736,119	BRANDEL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Andrew T. Piziali	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 17 April 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on 4/17/2007 has been entered.

### ***Claim Rejections - 35 USC § 102/103***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 5,292,578 to Kolzer.

Regarding claims 1-9, Kolzer discloses a woven (patterned) glass fiber textile fabric comprised of a glass fiber yarn with a titer of from about 34 to about 1000 tex, preferably 272 tex, as the warp, and a glass fiber yarn having a titer ranging from about 68 to about 1200 tex, preferably from about 136 to about 900 tex, as the weft (see entire document including column 4, line 26 through column 5, line 31).

In the event that it is shown that the applied prior art does not disclose the claimed warp and weft titer with sufficient specificity, the invention is obvious because it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the warp and weft titer to within the claimed ranges, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 2 and 3, Kolzer discloses that the titer of warp yarn may be from about 34 to about 1000 tex, preferably 272 tex (see entire document including column 4, line 26 through column 5, line 31).

Regarding claims 4-6, Kolzer discloses that the titer of the weft may be from about 68 to about 1200 tex, preferably about 136 to about 900 tex (see entire document including column 4, line 26 through column 5, line 31).

Regarding claims 7 and 8, Kolzer discloses that the warp density of the textile fabric may range from about 8 to about 40 threads/cm (column 5, lines 18-25).

Regarding claim 9, Kolzer discloses that the weft density of the textile fabric may range from about 1 to about 10 threads/cm (column 5, lines 18-25).

5. Claims 1-6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 6,667,097 to Tokarsky.

Regarding claims 1-6, Tokarsky discloses a woven (patterned) glass fiber textile fabric comprised of a glass fiber yarn with a titer of from 30 to 5000 denier (3 to 556 tex) as the warp and weft (see entire document including column 17, lines 16-42, the paragraph bridging columns 17 and 18, and the paragraph bridging columns 36 and 37).

In the event that it is shown that the applied prior art does not disclose the claimed warp and weft titer with sufficient specificity, the invention is obvious because it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the warp and weft titer to within the claimed ranges, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 2 and 3, Tokarsky appears to teach the claimed warp titer with sufficient specificity. In the event that it is shown that Tokarsky does not disclose the claimed titer with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp fiber, such as to 278 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 4 and 6, Tokarsky appears to teach the claimed weft titer with sufficient specificity. In the event that it is shown that Tokarsky does not disclose the claimed titer with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp fiber, such as to 200 or 330 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

***Claim Rejections - 35 USC § 103***

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,292,578 to Kolzer as applied to claims 1-9 above, and further in view of USPN 3,870,547 to Workman.

Kolzer discloses that the textile is impregnated with a polymeric binder (column 1, lines 15-23), but Kolzer does not appear to mention starch in the binder. Workman discloses that it is known in the glass fiber reinforced art to impregnate a glass fiber fabric with a binder comprising polymeric and starch components (see entire document). Workman discloses that the starch component prevents abrasion of the fibers (column 1, lines 13-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to impregnate the textile with a chemical formulation comprised of starch and polymeric binder, because the starch component would prevent abrasion of the fibers.

Art Unit: 1771

7. Claims 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,667,097 to Tokarsky as applied to claims 1-6 above, and further in view of anyone of USPN 6,337,104 to Draxo or USPN 6,759,116 to Edlund.

Regarding claim 7, Tokarsky discloses that the fabric may be used as a wall covering (column 44, lines 55-65, and column 45, lines 35-47), but Tokarsky is silent with regards to specific warp density. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional woven wall covering warp densities. Draxo and Edlund each provide this conventional teaching showing that it is known in the woven wall covering art to use a warp density of 3.15 to 3.4 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the warp density from 3.15 to 3.4 threads/cm, because it is understood by one of ordinary skill in the art that the warp density determines properties such as appearance and weavability, and motivated by the expectation of successfully practicing the invention of Tokarsky.

Regarding claim 9, Tokarsky discloses that the fabric may be used as a wall covering (column 44, lines 55-65, and column 45, lines 35-47), but Tokarsky is silent with regards to specific weft density. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional woven wall covering weft densities. Draxo and Edlund each provide this conventional teaching showing that it is known in the woven wall covering art to use a weft density of 1.7 to 6.0 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the weft density from 1.7 to 6.0 threads/cm, because it is

understood by one of ordinary skill in the art that the weft density determines properties such as appearance and weavability, and motivated by the expectation of successfully practicing the invention of Tokarsky.

Regarding claim 10, Tokarsky discloses that the fabric may be used as a wall covering (column 44, lines 55-65, and column 45, lines 35-47), but Tokarsky is silent with regards to impregnating the textile with the claimed chemical formulation. Draxo and Edlund each disclose that it is known in the woven wall covering art to impregnate a woven wall covering fabric with a chemical formulation comprised of a starch binder and a polymeric binder to provide the wall covering with adhesive characteristics (column 3, lines 1-31 of Draxo and column 3, lines 1-22 of Edlund). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to impregnate the wall covering fabric with a chemical formulation comprised of a starch binder and a polymeric binder, motivated by a desire to provide the wall covering with adhesive characteristics.

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,667,097 to Tokarsky as applied to claims 1-6 above, and further in view of USPN 6,267,151 to Moll.

Tokarsky discloses that the fabric may be used as a wall covering (column 44, lines 55-65, and column 45, lines 35-47), but Tokarsky is silent with regards to specific warp density. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional woven wall covering warp densities. Moll provides this conventional teaching showing that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm (column 1, lines 50-62). Therefore, it would have been obvious to one having

Art Unit: 1771

ordinary skill in the art at the time the invention was made to make the warp density between 4 and 10 threads/cm, because it is understood by one of ordinary skill in the art that the warp density determines properties such as appearance and weavability, and motivated by the expectation of successfully practicing the invention of Tokarsky.

9. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,586,934 to Blalock.

Regarding claims 1-6, Blalock discloses a woven (patterned) glass fiber textile fabric comprised of a glass fiber yarn with a titer of 333 or 666 tex as the warp and weft (see entire document including column 2, lines 49-59, column 5, lines 18-33, and Example 1).

Although Blalock does not specifically mention a warp and weft yarn titer of from 270 to 300 tex, absent a showing of unexpected results from use of a titer of from 270 to 300 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp and weft fiber, such as from 270 to 300 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 2 and 3, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp and weft fiber, such as to 278 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of

loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 4 and 6, Blalock discloses that the weft yarn may have a titer of 333 tex (column 5, lines 18-33).

Regarding claim 5, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the weft fiber, such as to 200 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

10. Claims 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,586,934 to Blalock as applied to claims 1-6 above, and further in view of anyone of USPN 6,337,104 to Draxo or USPN 6,759,116 to Edlund.

Regarding claim 7, Blalock discloses that the fabric may be used as a wall covering (column 1, lines 15-25), but Blalock is silent with regards to specific warp density. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional woven wall covering warp densities. Draxo and Edlund each provide this conventional teaching showing that it is known in the woven wall covering art to use a warp density of 3.15 to 3.4 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the warp density from 3.15 to 3.4 threads/cm, because it is understood by one of ordinary skill in

the art that the warp density determines properties such as appearance and weavability, and motivated by the expectation of successfully practicing the invention of Blalock.

Regarding claim 9, Blalock discloses that the fabric may be used as a wall covering (column 1, lines 15-25), but Blalock is silent with regards to specific weft density. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional woven wall covering weft densities. Draxo and Edlund each provide this conventional teaching showing that it is known in the woven wall covering art to use a weft density of 1.7 to 6.0 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the weft density from 1.7 to 6.0 threads/cm, because it is understood by one of ordinary skill in the art that the weft density determines properties such as appearance and weavability, and motivated by the expectation of successfully practicing the invention of Blalock.

Regarding claim 10, Blalock discloses that the fabric may be used as a wall covering (column 1, lines 15-25), but Blalock is silent with regards to impregnating the textile with the claimed chemical formulation. Draxo and Edlund each disclose that it is known in the woven wall covering art to impregnate a woven wall covering fabric with a chemical formulation comprised of a starch binder and a polymeric binder to provide the wall covering with adhesive characteristics (column 3, lines 1-31 of Draxo and column 3, lines 1-22 of Edlund). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to impregnate the wall covering fabric with a chemical formulation comprised of a starch binder and a polymeric binder, motivated by a desire to provide the wall covering with adhesive characteristics.

Art Unit: 1771

11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,586,934 to Blalock as applied to claims 1-6 above, and further in view of USPN 6,267,151 to Moll.

Blalock discloses that the fabric may be used as a wall covering (column 1, lines 15-25), but Blalock is silent with regards to specific warp density. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional woven wall covering warp densities. Moll provides this conventional teaching showing that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm (column 1, lines 50-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the warp density between 4 and 10 threads/cm, because it is understood by one of ordinary skill in the art that the warp density determines properties such as appearance and weavability, and motivated by the expectation of successfully practicing the invention of Blalock.

12. Claims 1-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of USPN 6,337,104 to Draxo or USPN 6,759,116 to Edlund in view of USPN 6,667,097 to Tokarsky.

Regarding claims 1-7 and 9-10, Draxo and Edlund each disclose a woven patterned glass fiber textile comprised of a glass fiber yarn with a titer of from 139 to 142 tex as the warp, and a glass fiber yarn having a titer ranging from 165 to 550 tex as the weft (see entire documents including column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund).

Draxo and Edlund each disclose that many glass fiber yarns may be selected for use when producing the woven materials, but neither appears to specifically mention a titer of from 270 to

300 tex as the warp. Tokarsky, however, discloses that it is known in the woven wall covering art (paragraph bridging columns 17 and 18, column 44, lines 55-65, and column 45, lines 35-47) to vary the denier (tex) of a fabric from 30 to 5000 (column 17, lines 17-42). Absent a showing of unexpected results from use of a titer of from 270 to 300 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp fiber, such as from 270 to 300 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 2 and 3, absent a showing of unexpected results from use of a titer of 278 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp fiber, such as to 278 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claim 7, Draxo and Edlund each disclose that the warp density may be 3.15 to 3.4 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund).

Regarding claim 9, Draxo and Edlund each disclose that the weft density may be 1.7 to 6.0 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund).

Regarding claim 10, Draxo and Edlund each disclose that the textile may be impregnated with a chemical formulation comprised of a starch binder and a polymeric binder (column 3, lines 1-31 of Draxo and column 3, lines 1-22 of Edlund).

Art Unit: 1771

13. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of USPN 6,337,104 to Draxo or USPN 6,759,116 to Edlund in view of USPN 6,667,097 to Tokarsky as applied to claims 1-7 and 9-10 above, and further in view of USPN 6,267,151 to Moll.

Draxo and Edlund each disclose that the warp density may be 3.15 to 3.4 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund), but neither appears to specifically mention a warp density of in the range of 6 to 10 threads/cm. Moll, however, discloses that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm (column 1, lines 50-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the warp density, such as from 4 to 10 threads/cm, because it is understood by one of ordinary skill in the art that the warp density determines properties such as appearance and weavability, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

14. Claims 1-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of USPN 6,337,104 to Draxo or USPN 6,759,116 to Edlund in view of USPN 4,586,934 to Blalock.

Regarding claims 1-7 and 9-10, Draxo and Edlund each disclose a woven patterned glass fiber textile comprised of a glass fiber yarn with a titer of from 139 to 142 tex as the warp, and a glass fiber yarn having a titer ranging from 165 to 550 tex as the weft (see entire documents including column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund).

Draxo and Edlund each disclose that many glass fiber yarns may be selected for use when producing the woven materials, but neither appears to specifically mention a titer of from 270 to

300 tex as the warp. Blalock, however, discloses that it is known in the woven wall covering art (column 1, lines 15-25) to use a glass fiber yarn with a titer of up to 666 tex (specific reference is made of 333 tex and 666 tex, see column 5, lines 18-33 and Example 1). Absent a showing of unexpected results from use of a titer of from 270 to 300 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp fiber, such as from between 270 to 300 tex, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 2 and 3, absent a showing of unexpected results from use of a titer of 278 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp fiber, such as 278 tex, because it is understood by one of ordinary skill in the art that the titer determines the strength of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claim 7, Draxo and Edlund each disclose that the warp density may be 3.15 to 3.4 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund).

Regarding claim 9, Draxo and Edlund each disclose that the weft density may be 1.7 to 6.0 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund).

Regarding claim 10, Draxo and Edlund each disclose that the textile may be impregnated with a chemical formulation comprised of a starch binder and a polymeric binder (column 3, lines 1-31 of Draxo and column 3, lines 1-22 of Edlund).

15. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of USPN 6,337,104 to Draxo or USPN 6,759,116 to Edlund in view of USPN 4,586,934 to Blalock as applied to claims 1-7 and 9-10 above, and further in view of USPN 6,267,151 to Moll.

Draxo and Edlund each disclose that the warp density may be 3.15 to 3.4 threads/cm (column 2, lines 40-61 of Draxo and column 2, lines 35-54 of Edlund), but neither specifically mentions a warp density of in the range of 6 to 10 threads/cm. Moll, however, discloses that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm (column 1, lines 50-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the warp density, such as from 4 to 10 threads/cm, because it is understood by one of ordinary skill in the art that the warp density determines properties such as appearance and weavability, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

#### *Response to Arguments*

16. Applicant's arguments filed 4/17/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that Kolzer is nonanalogous art, it is noted that the claims are rejected under 35 USC 102. Arguments that the alleged anticipatory prior art is nonanalogous art or teaches away from the invention or is not recognized as solving the problem solved by the claimed invention, are not germane to a rejection under section 102. See MPEP 2131.05.

Regarding the 35 USC 103 rejections in view of Kolzer, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Kolzer is in the field of applicant's endeavor, which is woven glass fibers textiles (see title of current application). It is further noted that both Kolzer and the current applicant were concerned with providing the glass fiber textile with increased strength (see page 4, lines 3-8 of the current specification).

The applicant asserts that the fabric disclosed by Kolzer is not patterned. The examiner respectfully disagrees. The definition of "pattern" is "An artistic or decorative design." Kolzer discloses that the fabric may be woven, and may even be a woven web wherein the two thread systems are connected by a floating weave (column 4, lines 26-65). Clearly, a woven fiber design is a pattern. A woven web wherein the two thread systems are connected by a floating weave is an especially artistic and decorative woven pattern.

The applicant asserts that there is no motivation to vary the titer of any of the references. The examiner respectfully disagrees. Firstly, no motivation is required where the claims are rejected under 35 USC 102. Secondly, regarding 35 USC 103 rejections, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the warp and weft titer to within the claimed ranges, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

The applicant asserts that the examiner has not established that a titer is a result-effective variable. The examiner respectfully disagrees. Kolzer discloses that higher titers “of course” result in greater mechanical load resistance (paragraph bridging columns 4 and 5). In addition, Stumpf discloses that the depth of pile or degree of loft depends on the denier of the fibers (paragraph bridging columns 4 and 5). Further, on page 17, third full paragraph of the response filed on 4/17/2007, the applicant admits that increasing the titer tends to increase the coarseness and stiffness of the yarn.

In response to applicant's argument that Tokarsky is nonanalogous art, it is noted that the claims are rejected under 35 USC 102. Arguments that the alleged anticipatory prior art is nonanalogous art or teaches away from the invention or is not recognized as solving the problem solved by the claimed invention, are not germane to a rejection under section 102. See MPEP 2131.05.

Regarding the 35 USC 103 rejections in view of Tokarsky, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Tokarsky is in the field of applicant's endeavor, which is woven glass fibers textiles (see title of current application). It is further noted that Tokarsky specifically mentions wall coverings (column 44, lines 55-65).

The applicant asserts that the fabric disclosed by Tokarsky is not patterned. The examiner respectfully disagrees. The definition of "pattern" is "An artistic or decorative design." Tokarsky discloses that the fabric may be woven (paragraph bridging columns 17 and 18). Clearly, a woven fiber design is a pattern.

The applicant asserts that Tokarsky fails to teach or suggest the claimed titer because Tokarsky simply discloses a titer of 30 to 5000 denier (3 to 556 tex). The examiner respectfully disagrees. A titer range of 270 to 300 tex overlaps both currently claimed titer ranges. Since the titer range disclosed by Tokarsky (3 to 556 tex) completely overlaps said range (270 to 300 tex), Tokarsky discloses the currently claimed range with sufficient specificity. In addition, even in the event that it is shown that Tokarsky does not disclose the claimed warp and weft titer with sufficient specificity, the invention is obvious because it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer to within the claimed range, because it is understood by one of ordinary skill in the art that the titer determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

The applicant asserts that Blalock fails to teach or suggest the claimed titer because Blalock discloses a yarn identified as 666 TEX and another yarn identified as 333TEX, rather than a yarns with a titer of 666 tex or 333 tex. The examiner respectfully disagrees. Blalock discloses that the 333 TEX yarn has a diameter about one-half the size of the 666 TEX yarn (column 5, lines 18-33). This disclosure clearly teaches that TEX is referring to the titer.

Regarding claims 7 and 8, the applicant asserts that Moll teaches away from combining with Tokarsky, Blalock, Edlund, or Draxo because Moll discloses an upper limit of 150 tex. The examiner respectfully disagrees. Moll was simply cited because the references don't appear to mention the specifically claimed warp density. Moll provides this conventional teaching showing that it is known in the wall covering art to use warp densities of between 4 and 10 threads/cm (column 1, lines 50-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the warp density between 4 and 10 threads/cm, because it is understood by one of ordinary skill in the art that the warp density determines properties such as appearance and weavability, and motivated by the expectation of successfully practicing the invention of the references. No motivation is necessary to modify the tex of Moll because the tex teaching disclosed by Moll is not relied upon to reject the claims.

The applicant asserts that one skilled in the art would not look to Blalock to modify Edlund or Draxo. The examiner respectfully disagrees. Draxo and Edlund each disclose that many glass fiber yarns may be selected for use when producing the woven materials, but neither appears to specifically mention a titer of from 270 to 300 tex as the warp. Blalock, however, discloses that it is known in the woven wall covering art (column 1, lines 15-25) to use a glass fiber yarn with a titer of up to 666 tex (specific reference is made of 333 tex and 666 tex, see column 5, lines 18-33 and Example 1). Absent a showing of unexpected results from use of a titer of from 270 to 300 tex as the warp, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the titer of the warp fiber, such as from between 270 to 300 tex, because it is understood by one of ordinary skill in the art that the titer

determines properties such as strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

The applicant asserts that there is no motivation to vary the titer of Draxo or Edlund because increasing the titer would increase the stiffness and coarseness of the yarn. The examiner respectfully disagrees. It is understood by one of ordinary skill in the art that the titer determines properties such as stiffness of the fabric, strength of the fabric, depth of pile, degree of loft of the loops, and appearance of the fabric. It would have been obvious to one having ordinary skill in the art at the time the invention was made to increase the titer, because some applications are more concerned with a higher strength of the fabric, a higher depth of pile, and/or a higher degree of loft of the loops, as opposed to a decrease in flexibility.

#### *Conclusion*

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

atp

*ATP* 5/18/07

ANDREW PIZIALI  
PRIMARY EXAMINER